RULES

OF

TENNESSEE DEPARTMENT OF HEALTH BOARD FOR LICENSING HEALTH CARE FACILITIES

CHAPTER 1200-8-14 PEDIATRIC TRAUMA CENTERS

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1200-8-14-.01 PURPOSE.

The Board recognizes that, although the overall instance of traumatic injury and death is less in the childhood age group than in the adult age groups, in many ways the development of an appropriate treatment scenario is more difficult in childhood injuries. Children are not "little adults". While it is recognized that the adult psychological response to trauma can be overwhelming, the injured child and his/her family present a much more complex environment for the trauma team. Since their acute cardiorespiratory response to trauma differs significantly from the adult, reacting to the critically injured child presents major problems to those who are only occasionally responsible for such patients.

Injured children present many problems over and above those relating to their injured parts. These include such diverse considerations as psychological management, problems of vascular access, administration of anesthesia, intensive care facilities specifically designed for children, as well as laboratory and support services similarly designed. The salvage of seriously injured children requires the services of physicians and nurses with specialized training in pediatric care, both surgical and medical. The nursing staff in particular must be educated and experienced in trauma nursing and the care, growth, and development of the pediatric patient. In most instances these resources are found in pediatric hospitals or hospitals with a significant pediatric commitment. Because of the special requirements for pediatric trauma, the Tennessee Board for Licensing of Health Care Facilities has developed these Pediatric trauma standards.

This Task Force, and hence the Board, recognized that trauma kills more children than all other deaths in this age group combined. In 1985, 3,709 children 15 years of age and under were killed in accidents involving motor vehicles, 934 of them five years and under. In Tennessee that year, of the 1,101 such fatalities, 99 were under the age of 15 and another 167 were ages 16 to 20, or, as with the national average, one in four of all such deaths. National statistics also show that for every pediatric trauma death there are 10 pediatric patients who will require pediatric trauma center care. Where systems of trauma care have been developed, deaths from accidental injury have decreased significantly in adults. However, only where pediatric trauma care systems have been developed has a similar decrease been shown in children.

Authority: T.C.A. §§68-11-201 through 68-11-205, 68-11-207 through 68-11-210, 68-11-213, 68-11-214, 68-11-216, 68-11-219 through 68-11-221, and 4-5-202. **Administrative History:** Original rule filed January 30, 1989; effective March 16, 1989.

1200-8-14-.02 DEFINITIONS.

- (1) "Levels of Care" shall mean the type of trauma service provided by the institution as shown by the degree of commitment in personnel and facilities made to the delivery of that service.
- (2) "Level I" shall designate that institution committed to providing optimal care for the acutely injured pediatric patient which meets all requirements in this regulation defined a Level of care I.

(3) "Level II" shall designate an institution committed to providing optimal care for the acutely injured pediatric patient that meets the requirements in this regulation defined as Level of care II.

Authority: T.C.A. §§68-11-201 through 68-11-205, 68-11-207 through 68-11-210, 68-11-213, 68-11-214, 68-11-216, 68-11-219 through 68-11-221, and 4-5-202. **Administrative History:** Original rule filed January 30, 1989; effective March 16, 1989.

1200-8-14-.03 REQUIREMENTS.

(1) Hospital Organization

There shall be demonstrated commitment by the hospital Board of Directors, administration, medical staff, and nursing staff to treat any pediatric patients presented to the facility for care.

The facility shall provide hospital emergency services to any applicant who applies for the same in case of injury or acute medical condition where the same is liable to cause death or severe injury or illness.

As specified in T.C.A. §68-39-302, the medical need of an applicant and the available medical resources of the facility, rather than the financial resources of an applicant, shall be the determining factors concerning the scope of service provided.

			LEVELS			
			I	II		
(a)	LEV	ELS OF CARE				
	1.	Trauma Service/Team	X	X		
	2.	Surgery Departments/Divisions/Services/				
		Sections (each staffed by qualified specialists).				
		Cardiothoracic Surgery	X	X^1		
		General Surgery	X	X		
		Neurologic Surgery	X	X		
		Gynecologic Surgery	X	X		
		Ophthalmic Surgery	X	X		
		Oral & Maxillofacial Surgery/Dentistry	X	X		
		Orthopedic Surgery	X	X		
		Otorhinolaryngologic Surgery	X	X		
		Pediatric Surgery	X	\mathbf{X}^2		
		Plastic Surgery	X	X		
		Urologic Surgery	X	X		
	3.	Non-surgical Departments/Divisions/				
		Services/Section (staffed by qualified specialists)	X	X		
		Emergency Medicine	X^3	X		
		Pediatrics	X	X		
		Anesthesia	X	X		
		Radiology	X	X		
		Pathology	X	X		

		LEVELS	
		I	II
4.	Surgical Specialties, in-house, 24 hours a day.		
	Pediatric Surgery Neurologic Surgery	X ⁴ X ⁵	
	On-call and available from inside or outside the hospital.		
	Cardiothoracic Surgery General Surgery Neurologic Surgery	X	$egin{array}{c} X^1 \ X \ X^6 \end{array}$
	Microsurgery Capabilities Gynecologic Surgery Hand Surgery	X X X	X^7 X X^8
	Ophthalmic Surgery Oral and Maxillofacial Surgery/ Dentistry	X X	X X
	Orthopedic Surgery Otorhinolaryngologic Surgery Plastic Surgery Urologic Surgery	X X X X	X X X X
5.	Pedidontist Nonsurgical Specialties Availability,	X	X
	In-hospital, 24 hours a day:		
	Anesthesiology Pediatric Emergency Specialist Pediatric Intensivist	X ⁹ X X ¹¹	X^{10}
	On-call and available from inside or outside the hospital:		
	Anesthesiology Cardiology	X^{12}	X X
	Pulmonary Medicine Gastroenterology Hematology Infectious Disease	X^{12} X^{12} X^{12} X^{12}	X X X X
	Nephrology Neurology Pathology	$X^{12} \\ X^{12} \\ X^{13}$	X X X X ¹³
	Pediatrics Psychiatry/Psychology Radiology	$X \\ X^{12} \\ X^{12}$	X X X
	Physical Medicine/Rehabilitation	X^{12}	

(b) SPECIAL FACILITIES: RESOURCES/CAPABILITIES

1. Emergency Department

(i) Personnel

		LEVELS	
		I	II
(I)	Designated Physician Director (Boarded in Pediatrics with additional training or extensive expertise in Pediatrics Emergency Medicine or, boarded in Emergency Medicine with additional one (1) year training in Pediatric Emergency Medicine.	X	X^{14}
(II)	Physician with special competence in the care of the critically ill or injured child present in the E.D. 24 hours a day.	X^{15}	X^{10}
(III)	E.D. staffed by full time (minimum of 100 hours/month) Is emergency physicians.	X^{15}	X
(IV)	Designated Nursing Supervisory position (full-time) to oversee pediatric emergency care.	X	X^{16}
(V)	All RN personnel assigned to the Pediatric Emergency Department component 24 hours a day will have special training in Pediatric Care and/or one (1) year pediatric Critical Care experience.	X	X ¹⁷
(VI)	Social Services and/or Child Life available in house or on-call 24 hours a day.	X	X

				LEV	ELS
(ii)	Equi	pment		I	II
	for th	ne criti	for resuscitation and to provide support cally or seriously injured, appropriately I ages, shall include but not be limited		
	to.		X	X	
	(I)	Com	munication equipment with EMS ms.	X	X
	(II)	laryn	ay control and ventilation equipment goscopes - sizes 0, 1, 2, and 3 straight curved.	X	X
		I.	laryngoscopes - sizes 0, 1, 2, and 3 straight and curved.	X	X
		II.	Bag-valve mask resuscitators, infant, child and adult.	X	X
		III.	Endotracheal tubes, cuffed and uncuffed, sized 2.5 to 9.0, sizes 2.5 to 6.0 uncuffed.	X	X
		IV.	Suction and appropriate sized catheters.	X	X
		V.	Airways	X	X
		VI.	Oxygen	X	X
		VII.	Tracheostomy and thoracostomy trays with tracheostomy tubes size 0 to 3 and chest tubes size 8 to 28		
			French.	X	X
	(III)	pedia	iopulmonary monitors with infant and tric capability and at least two pressure bility.	X	X^{18}
	(IV)	lines,	eters for intravenous and intraarterial (3 to 8 French, 16 to 24 gauge, osseous needles).	X	X
	(V)	pedia	itor - defibrillator with adult and atric internal and external paddles, 0 to watt/sec. capability.	X	X

	LEV	ELS
	I	II
(VI) Trays for veinsection, saturing, plastics.	X	X
(VII) Pediatric splints, casts, traction, including equipment for cervical spine stabilization.	X	X
(VIII) NG tubes - #10 to 18 French, 5 and 8 French feeding tubes.	X	X
(IX) Foley catheters, #8 through 14.	X	X
(X) Dialysis catheters.	X	X
(XI) Drugs, in pediatric concentrations.	X	X
(XII) IV solutions with both microdrip and high volume infusion sets.	X	X
(XIII) Pediatric LP and subdural trays	X	X
(XIV) Burr hole and ICP monitor trays.	X	X
(XV) Blood pressure cuffs for premie, infant, child, adult, thigh.	X	X
(XVI) Doppler for BP monitoring.	X	X
(XVII)Non-invasive blood pressure monitor.	X	X
(XVIII)Pulse oximeter.	X	X
(XIX) Pediatric anti-shock (MAST) trousers.	X	X
(XX) Infusion pumps with fractional cc.	X	X
capability. (XXI) Pediatric scales for weight measurement.	X	X
(XXII)Temperature control devices for patient, IV fluids and blood.	X	X
Facility Design		
Full time pediatric emergency area with a designated area for the resuscitation and stabilization of pediatric trauma patients; equipped for neonatal, pediatric/adolescent patients and of adequate size to accommodate a full resuscitation	Y	v
team.	X	X

(iii)

(2) PEDIATRIC INTENSIVE CARE UNIT

For Level 11 centers, a current signed transfer agreement with a hospital with a Pediatric Intensive Care Unit should be appropriately utilized. An adult intensive care unit will not suffice for the care of critically injured pediatric patients.

			LEVELS	
			I	II
(a)	Pers	sonnel		
	1.	Designated Medical Director, Boarded in Pediatrics, and Board certified/eligible for pediatric critical care.	X	X
	2.	Physician on duty in hospital 24 hours a day.	X^{11}	X
	3.	Designated nursing unit management (full-time pediatric).	X	X
	4.	RN to patient ratio, depending on acuity should not exceed 1:3 on each shift. RN's shall have special competence in pediatric critical care and special training in pediatric trauma care.	X	X
	5.	Support services from respiratory therapy, pharmacy, lab, x-ray, and blood bank available 24 hours a day.	X	X
	6.	A designated nurse educator shall be identified for the critical care unit.	X^{20}	X
	7.	Distinct physical facility.	X	X
		(i) may house medical or surgical patients.	X	X
		(ii) isolation capacity.	X	X
		(iii) defined bed requirements.	X	X
		 minimum 75 sq. ft./bed site 11 electrical outlets per bed* 2 oxygen outlets/bed 1 compressed air outlet per bed 2 vacuum outlets/bed 6 grounding sockets/bed = on backup emergency generator 		

8.

(Rule 1200-8-14-.03, continued)

		LEV	ELS
		I	II
	Monitoring equipment capability for continuous monitoring of:		
	(I) ECG/heart rate	X	X
	(II) Respirations	X	X
	(III) Temperature	X	X
	(IV) Central Venous Pressure	X	X
	(V) Pulmonary arterial pressure	X	X
	(VI) Intracranial pressure	X	X
	(VII) 3 simultaneous pressure capability	X	X
	(VIII) Non-invasive blood pressure	X	X
	(IX) Pulse oximeter	X	X
	(X) End-tidal PC02	X X	X X
	(XI) Pulmonary function tests (XII) Equipment Characteristics	X X	X
	(AII) Equipment Characteristics	Λ	Λ
	 high/low alarms for heart rate, respirations, and all pressures, 		
	- visible	X	X
	- audible	X	X
	II. electrical patient isolation	X	X
	III. routine testing and maintenance	X	X
Portal	ble Equipment		
(i)	Beds, cribs, isolets	X	X
(ii)	Oxygen source	X	X
(iii)	Oxygen analyzers	X	X
(iv)	Air-oxygen blenders	X	X
(v)	Humidifiers	X	X
(vi)	Compressors	X	X
(vii)	Respirators	X	X
(viii)	Emergency cart	X	X
(ix)	1 1	X	X
(x)	Suction machine	X	X
(xi)	**	X	X
	Pacemaker capability	X	X
	Infusion pumps with micro capability	X	X
(xv)	6 6	X	X
	Spot light	X	X
	Otoscope/opthalmoscope	X	X
) Refractometer Pediatric laryngoscope/bronchoscope	X X	X X
	Airway control and ventilation equipment	X	X
$(\Lambda\Lambda)$	7311 way control and ventuation equipment	1	Λ

(I) laryngoscopes sizes 0, 1, 2, and 3, straight and curved blades.

		(II)	bag-valve mask resuscitators, infant, child, adult			
		(III)	endotracheal tubes.			
		(IV)	suction catheters.			
		(V)	airways.			
				I	LEVELS	
				I		II
		(VI)	tracheostomy tray with tracheostomy tubes sizes 0 to 3.	X		X
		(VII)	thoracotomy tray with chest tubes (10 to 28 French) and pericardiocentesis capability.	X		X
	(xxi)	Scale	s	X		X
9.	Small	equipr	ment			
	(i)	-	gent and non-emergent drugs in pediatric ntrations.	X		X
	(ii)	Catheters for intravenous and intraarterial lines (3 to 8 French and 16 to 24 gauge) and intraosseous needles.		X		X
	(iii)	Venou	us and arterial cutdown trays.	X		X
	(iv)	Pediat	tric LP and subdural trays.	X		X
	(v)	ICP n	nonitor tray.	X		X
	(vi)	Pediat	tric splints and traction equipment.	X		X
	(vii)	Foley	catheters (8 to 14 in size).	X		X
	(viii)	NG tu	abes (#10 to 18 French and #3 and 5 feeding).	X		X
	(ix)	Dialys	sis catheters.	X		X
	(x)	Isolati	ion materials.	X		X
10.	Nursii	ng Edu	cation	X		X

(3) POST ANESTHETIC RECOVERY ROOM (PAR)

			LEV	ELS	
			I	II	
(a)	Pers	connel			
	1.	Registered nurses and other essential personnel on call 24 hours a day.	X	X	
	2.	Registered nurses caring for post anesthetic patients must be competent in the post anesthesia care of the pediatric trauma patient.	X	X	
(b)	Equ	ipment			
	1.	Airway control and ventilation equipment. Laryngoscopes, assorted blades, airways, endotracheal tubes, bag-mask resuscitators of all sizes.			
			X	X	
	2.	Oxygen, air and suction devices.	X	X	
	3.	Electrocardiographic pressure and intracranial pressure monitoring apparatus.	X	X	
	4.	Thermal control equipment: - Radiant warmer - Blood warmer	X	X	
	5.	Resuscitation cart containing emergency drugs and including pediatric drug dosage chart.	X	X	
	6.	Immediate access to sterile surgical supplies for emergency procedures including thoracostomy, thoracotomy, tracheostomy, and venesection.	X	X	
ACU	ТЕ НЕ	EMODIALYSIS CAPABILITY			
(a)	Registered nurses in-house or on-call 24 hours a day, trained in hemodialysis of the pediatric patient. X X^2				
(b)	Appr	opriate equipment for pediatric hemodialysis.	X	X^{21}	
ORG	SANIZI	ED BURN CARE			
		irected Burn Center/Unit staffed by nursing personnel urn care and equipped properly for pediatric patients.	X^{22}	X^{22}	

(4)

(5)

		ELS
	I	II
(6) SPINAL CORD INJURY MANAGEMENT CAPABILITY	X^{23}	X^{23}
(7) RADIOLOGIC SPECIAL CAPABILITIES 24 HOURS A DAY	X	X
(a) Angiography		
(b) Computed tomography		
(8) SOCIAL SERVICE CAPABILITIES AVAILABLE, ON CALI HOURS A DAY	L 24 X	X
(9) CHILD LIFE CAPABILITIES INCLUDING SPIRITUCIONSELING	UAL X	
(10) GENERAL PEDIATRIC MEDICAL / SURGICAL NURSING UN	NIT	
(a) Personnel		
 Pediatric nursing staff with special training in pedi trauma care. 	iatric X	X
2. Unit Nursing Administrator.	X	X
3. Unit Nurse Educator	X	X
(b) Equipment		
Equipment to provide support and resuscitation of the inj neonate, pediatric/adolescent patient should be readily avail and shall include but not be limited to:		
 Airway control and ventilation equipment inclu laryngoscopes, assorted blades, airways, endotrac tubes, and bag-mask resuscitators of all sizes. (equipment must be immediately available). 		X
 Oxygen, air, suction devices. 	X	X

				LEVELS	
				I	II
		3.	Electrocardiograph, monitor and defibrillator, to include internal and external paddles.	X	X
		4.	All standard intravenous fluids and administration devices, including IV catheters designed with the capacity for delivering IV fluids and medications at rates and amounts appropriate for children ranging in age from		
			neonate to adolescent.	X	X
		5.	Drugs and supplies necessary for emergency care.	X	X
		6.	Thoracotomy tube sets, cut-down trays.	X	X
(11)	PED	IATRI	C TRAUMA TEAM/SERVICE		
The hospital shall establish within its organization a defined Pediatric Trauma Service for child (see Standard I, "Hospital Organization").				a Service for the i	injured
	(a)	Surge Surge injure	Pediatric Trauma Program Director shall be a Pediatric eon, certified "or eligible for certification", in Pediatric ery with demonstrated special competence in care of the ed child. The Director shall have full responsibility and prity for the Trauma Service.	X	X
	(b)	Pedia	atric Trauma Nurse Coordinator		
		Pedia	atric Trauma Nurse Coordinator	X^{25}	
		Pedia	atric Nurse Coordinator		X^{26}
	(c)	Trau	ma Team members requiring immediate availability:		
		1.	Pediatric surgeon/Trauma Service Director or his/her designee.	X^{27}	X^{28}
		2.	Pediatric emergency physician or his/her designee.	X	X^{10}
		3.	Anesthesiologist	X^9	Λ
		4.	Neurologic surgeon	X^5	
		5.	Two Pediatric emergency department R.N.'s	X	X^{29}
		6.	Respiratory therapist	X	X
		7.	Laboratory technician	X	X

				LEVELS	
				I	II
		8.	Radiology technician	X	X
	(d)	Trau time)	ma Team members on-call (30 minutes or less response).		
		1. 2. 3. 4.	Anesthesiologist Neurologic Surgeon Orthopedic Surgeon Cardiothoracic Surgeon	X X	$egin{array}{c} X \\ X \\ X \\ X^1 \end{array}$
		5.	Support personnel on-call (within 30 minutes) inside or outside of the hospital.	X	X
			 (i) Chaplain (ii) Social Worker (iii) Child Protection Team (iv) Sexual Abuse Team 	X X X X	X X X X
	(e)	Supp Serv	oort Services On-Call in Hospital for Trauma Team ices.		
		 2. 	24 hour laboratory With micro capabilities and blood gasanalysis capabilities, and blood bank capabilities.24 hour X-ray capabilities	X	X
			(i) Ultrasound (ii) C.T. (iii) Angiography	X X X	X X X
		3.	24 hour Respiratory therapy capabilities with personnel with special competence in pediatric care and equipment.	X	X
(12)	PEDI	ATRI	C TRAUMA COMMITTEE		
	is re	esponsicols for ijured	abcommittee of the hospital's Critical Care Committee, and lible for developing, auditing and maintaining trauma or quality assurance. All disciplines involved in the care of child are responsible for being intimately familiar with these	X	X^{31}
	This	comm	nittee is chaired by the Director of the Pediatric Trauma		

Program and is to have representatives from each of the following:

			LEVELS	
			I	II
	(a) (b) (c) (d) (e) (f) (g) (h) (i) (j)	Pediatric Surgery Pediatric Emergency Department Pediatric Intensive Care Neurosurgery Anesthesia Radiology Orthopedics Pathology Respiratory Therapy Nursing (usually the Pediatric Trauma Nurse Coordinator and head nurse) or their designee from the Pediatric Emergency		
	(k)	Department, Pediatric Intensive Care Unit, and Pediatric regular post-surgical/trauma floor(s). Rehabilitation Therapy		
(13)	PEDI	ATRIC TRAUMA REGISTRY		
		e shall be a Pediatric Trauma Registry developed or adopted, and tained, to include but not be limited to auditing of:	X	X
	(a) (b) (c) (d) (e) (f) (g) (h)	Severity of injury (including a "Trauma score"). Anatomic site of injury. Nature of injury. Mechanism of injury. Classification of injury. Demographic information (e.g., age, sex, race, etc.). Outcome. Transport Particulars.		
(14)	OPEI	RATING SUITE: SPECIAL REQUIREMENTS		
• •	equip Depa Equip	operating suite in both Level I and Level II shall be staffed and oped to handle all children who are present in the Emergency rtment and are in need of immediate surgical intervention. Oment and supplies must be appropriate for care of the pediatric has patient ranging in age from neonate to adolescent.		
	(a)	An operating room dedicated to trauma service shall be adequately staffed with personnel IMMEDIATELY AVAILABLE "in-house" 24 hours a day.	X	X^{32}
	(b)	A second operating room shall be available and staffed within 30 minutes. When the first team is in surgery, the second call team will be alerted and available within 30 minutes.	X	X
	(c)	At least one registered nurse must be physically present in the	v	v

operating room.

X

 \mathbf{X}

			LEVELS		
			I		II
(d)	Equipment				
	1.	Cardiopulmonary bypass capability.	X		
	2.	Operating microscope	X		X7
	3.	Thermal control equipment	X		X
		-for patient, i.e., radiant warmers -for parenteral fluids -for blood -for environment, i.e., thermostatic room temperature control.			
	4.	X-ray capability, including C-arm	X		X
	5.	Endoscopes, all varieties	X		X
	6.	Craniotomy equipment, including intracranial pressure monitoring equipment.	X		X
	7.	Invasive and noninvasive monitoring equipment to include electrocardiographic, temperature, continuous pressure and pulse oximetry.			
	8.	Pediatric anesthesia equipment. Pediatric ventilation equipment and the ability to monitor administered oxygen concentration.	X		X
	9.	Airway control equipment including laryngoscopes, assorted blades, airways, endotracheal tubes, bag-mask resuscitators of all sizes. Oxygen, air, and suction devices.	X		X
	10.	Defibrillator, monitor, including internal and external paddles.	X		X
	11.	Instrumentation, i.e., blood pressure cuffs, chest tubes, nasogastric tubes, and urinary drainage apparatus specific to the pediatric patient ranging in age from neonate to adolescent.	X		X
	12.	Laparotomy tray	X		X
	13.	Thoracotomy tray and chest retractors of appropriate size.	X		X
	14.	Synthetic grafts of all sizes.	X		X

			LEVELS	
			I	II
		15. Spinal immobilization and neck immobilization equipment.	X	X
		16. Fracture table with Pediatric capability.	X	X
		17. Auto transfusion with Pediatric capability.	X	X
		18. Pediatric drug dosage chart.	X	X
		19. Tracheostomy tubes, neonatal through adolescent.	X	X
	(e)	Comprehensive toxicological screening		
(15)	CLINICAL LABORATORIES SERVICES AVAILABLE 24 HOURS A DAY			
	(a)	24 hour microcapabilities	X	X
	(b)	Standard analysis of blood, urine, and other body fluids	X	X
	(c)	Blood typing and cross matching	X	X
	(d)	Coagulation studies	X	X
	(e)	Blood Bank and access to a community central blood bank and hospital storage facilities	X	X
	(f)	Blood gases and pH determinations	X	X
	(g)	Microbiology	X	X
	(h)	Comprehensive toxicological screening	X	X
(16)	TRA	AUMA RESEARCH PROGRAM		
	Trau	uma Research Program	X	X
(17)	TRA	AUMA TRAINING PROGRAMS		
	Trair	ning Programs in Continuing Education Provided By and For:		

			LEVELS	
			I	II
	(a) (b) (c) (d)	Staff Physicians Nurses Allied health personnel Community physicians	X X X X	X X X X
	(e)	Prehospital providers (local and regional)	X	X
(18)	TRA	UMA REHABILITATION PROGRAM		
	nabilita ients.	ation Services with a special competence in the care of pediatric		
	(a) (b)	Physical Therapy Occupational Therapy	X X	X
	(c) (d)	Speech Therapy Special Education	X X	X
(19)	ORG	AN DONATION		
	proto	n Donation protocol - Each center must have an organized col with a transplant team or service to identify possible organ rs and assist in procuring for donation, consistent with federal	X	X
(20)	TRA	NSPORT CAPABILITIES		
	(a)	Active Participation in a Transport Program, air and ground, for critically injured pediatric patients.	X	X
	(b)	Helipad or Helicopter Landing Area	X	X
(21)	HOM	IE HEALTH SERVICES		
	Home	e Health Services		
		airement may be met by a contractual arrangement with an cy to provide home health services).	X	X

FOOTNOTES

- 1. Or substituted by a current signed transfer agreement with an institution with Cardiothoracic Surgery and Cardio-Pulmonary bypass capability.
- 2. Or substituted by a current signed transfer agreement with a hospital having a pediatric surgical service. A general surgeon with a particular interest in pediatric surgery should be present at the Level II center.
- 3. A defined administrative component of Pediatric Emergency Medicine.

- 4. This requirement may be fulfilled by senior surgical residents (greater than or equal to PGY4) who have special competence, as designated by the Chief of Surgery, in the assessment and treatment of emergency situations in children. When these personnel are used to fulfill this requirement, staff pediatric surgical specialists shall be promptly available within 30 minutes. In the temporary absence of the Pediatric Surgeon this requirement may be fulfilled by a General Surgeon with additional training and/or experience in pediatric surgery as designated by the Pediatric Surgeon.
- 5. This requirement may be fulfilled by a neurosurgical resident who has special competence, as judged by the Chief of Neurosurgery, in the care of patients with neurosurgical emergencies, and who is capable of assessing emergent conditions and initiating treatment in the injured child. A staff specialist in Neurosurgery must be promptly available within 30 minutes. This requirement can be met by an attending surgeon and/or (greater than or equal to PG Y4) surgical resident.
- 6. Thirty (30) minutes response time.
- 7. Or substituted by current signed transfer agreement with an institution with Microsurgery capability.
- 8. Or substituted by current signed transfer agreement with an institution with Hand surgery capability.
- 9. Requirement may be fulfilled by an anesthesia (PG Y3) resident capable of assessing emergency situations and initiating proper treatment or a CRNA as creditialed by the Chief of Anesthesiology. A staff anesthesiologist must be promptly available within thirty (30) minutes.
- 10. Requirement may be met by an Emergency Medicine Physician with competence in management of the pediatric patient. Requires a physician with training in pediatrics such as elective pediatric emergency department continuing education courses or completing the advance pediatric life support course.
- 11. Requirements may be-fulfilled by attending level pediatricians or pediatric residents (PG Y2 or above) designated by the PICU Director as capable of assessing and treating emergency conditions in pediatric patients. When residents are used to fulfill this requirement, the staff specialist in Pediatric Critical Care Medicine shall be promptly available within thirty (30) minutes. This requirement shall be provided in addition to the Pediatric Emergency attendant in the emergency department.
- 12. All medical specialists should have pediatric expertise as evidenced by Board Certification, Fellowship training, or demonstrated commitment and continuing medical education in their subspecialty area.
- 13. Forensic pathologist must be available either as part of the hospital staff or on a consulting basis.
- 14. Requirement may be met by a full time Emergency Medicine physician with extensive experience in pediatric care and with a Pediatric consultant readily available.
- 15. Requires a specialist in Pediatric Emergency Medicine. This individual must be (a) Board eligible or certified in Pediatrics, OR (b) Board prepared or certified in Emergency Medicine with formal training (a minimum of one (1) year) in Pediatric Emergency Medicine, AND, (c) spending a minimum of 100 hours in the delivery of emergency care to the pediatric patient per month.
- 16. The requirement may be met by a nurse designated as responsible for providing pediatric expertise to the Emergency Department.
- 17. Requirement may be met by having at least one (1) such qualified RN per shift.
- 18. Requirement may be met by having one such monitor with infant and pediatric capability.
- 19. Requirement may be met by having a specified area for the pediatric resuscitation and stabilization.

- 20. An advanced pediatric life support course and a Nurse Trauma course designed by the Director of the Trauma Team will be available to all PICU nursing staff.
- 21. Or substituted by a current signed transfer agreement with a hospital having hemodialysis capabilities.
- 22. Or substituted by a current signed transfer agreement with a Burn Center or hospital with a Burn Center.
- 23. In circumstances where a designated spinal cord injury rehabilitation center exists in the region which is equipped with personnel and facilities specific for children, early transfer should be considered. Formal written transfer agreements should be in effect.
- 24. Requirement may be met by a General Surgeon with additional training and/or experience in pediatric surgery.
- 25. Responsible for QA, nursing education and other operational issues.
- 26. Responsible for coordination of levels of pediatric trauma activity including QA.
- 27. Th is requirement may be fulfilled by senior surgical residents (greater than or equal to PG Y4) who have special competence, as designated by the Chief of Surgery, in the assessment and treatment of emergency situations in children. When these personnel are used to fulfill this requirement, staff pediatric surgical specialists shall be promptly available within 30 minutes.
- 28. Requirement may be met by a General Surgeon with additional training and/or experience in pediatric surgery, thirty (30) minutes or less from the hospital.
- 29. This requirement may be met by general emergency department RN's.
- 30. Requirement may be met by having at least one therapist on each shift with pediatric experience and/or education.
- 31. This requirement may be met by the hospital's Trauma Committee.
- 32. Nursing staff may be available on call.
- 33. Pediatric Trauma Standards Interpretations developed by the Board.

Authority: T.C.A. §§68-11-201 through 68-11-205, 68-11-207 through 68-11-210, 68-11-213, 68-1-214, 6-1-216, 68-11-219 through 68-11-221, and 4-5-202. **Administrative History:** Original rule filed January 30, 1989; effective March 16, 1989.

1200-8-14-.04 PROGRAMS FOR QUALITY ASSURANCE.

- (1) Special audit for trauma deaths.
 - (a) There shall be a review of ALL trauma related deaths.
 - (b) There must be a mechanism in place to review all deaths and identify those that are primary admitted patients versus secondary transferred patients. Those transferred must be further defined as:
 - 1. transferred after treatment, i.e., airway and fluid management, or

- 2. direct admission after prolonged treatment which may have included surgery and was provided over several days at the primary receiving institution.
- (2) Morbidity and Mortality Review
- (3) Trauma Conference, Multidisciplinary
 - (a) Regular and periodic multidisciplinary trauma conferences that include ALL members of the trauma team shall be held. This conference reviews the Quality Assurance through critiques of ALL individual cases. Optimally, this will be a weekly conference.
 - (b) There must be documentation of:
 - 1. subject matter
 - 2. attendance
 - (c) This conference should also include periodic review of:
 - 1. Morbidity and mortality.
 - 2. Mechanism of injury.
 - 3. Review of the emergency medical service locally and regionally.
 - 4. Specific case review.
 - 5. Trauma center/system review.
 - 6. Identification and solution of specific problems including organ procurement and donation.
- (4) The completed prehospital trip form must be included with the Medical Record.
- (5) Medical and Nursing quality assessment program, utilization review, and tissue review.

Documentation of Quality Assurance must include:

- (a) Problem identification
- (b) Analysis
- (c) Action plan
- (d) Documentation and location of action
- (e) Implementation
- (f) Reevaluation

Authority: T.C.A. §§68-11-201 through 6-11-205, 68-11-207 through 68-11-210, 68-11-213, 68-11-214, 68-11-216, 68-11-219 through 68-11-221, and 4-5-202. **Administrative History:** Original rule filed January 30, 1989; effective March 16, 1989.

1200-8-14-.05 DESIGNATION PROCESS.

- (1) Implementation of the designation process will be by the Licensing Board for Health Care Facilities. A site visit team will be responsible for making recommendations to this Board. Institutions wishing to be designated as Level I or Level II Trauma Centers will make application to the Board. If the application is considered to be insufficient, this fact will be communicated to the Institution. If the application is deemed to be sufficient and the Institution is visited by the Site Visit Team, the Team's findings will be discussed in an "Exit Interview" with representatives of the Institution. The Team's findings will also be documented and submitted to the Board. Designation will be effective for up to four (4) years.
- (2) The Site Visit Team will be advisory to the Board, and will consist of the following:

- (a) Two physicians; one of whom will be a Pediatric Surgeon, another a Pediatric Intensivist or Pediatric Emergency Physician, one of whom will be from out of State.
- (b) A CEO of a Children's Hospital or a General Hospital with a Pediatric Trauma Program.
- (c) A Registered Nurse involved in Pediatric Emergency or Intensive Care.
 - 1. These members will act as Consultants to the Board, and will be selected with the assistance of the TNA (Tennessee Nurses Association), the THA (*Tennessee Hospital Association) and the state Committees on Trauma of the American College of Surgeons and the Tennessee Pediatric Society.
 - Interpretative guidelines adopted by the Board may be utilized as appropriate by the site team.
 - 3. All costs of the application process, including costs of the site visit, will be borne by the applying institution.
 - 4. Both Level I and Level II applications simultaneously will be considered and acted upon, so as to encourage establishment of a Pediatric Trauma System in each of the State's five regions.
- (3) VERIFICATION. Verification shall be biannual and based on submission to the Board of a written report by the Institution, summarizing information from the Institution's input to the Trauma Registry, Quality Assurance processes (to include outcome data), sponsored CME activities, Research activities, credentialing and CME participation of key Trauma Center personnel, current staffing and bedutilization data, and any revisions in the Pediatric Trauma Policies and Procedures implemented since the time of last site visit. Renewal of trauma center designation requires reapplication, including site visitation, every four (4) years.

Authority: T.C.A. §§68-11-201 through 68-11-205, 68-11-207 through 68-11-210, 68-11-213, 68-11-214, 68-11-216, 68-11-219 through 68-11-221, and 4-5-202. **Administrative History:** Original rule filed January 30, 1989; effective March 16, 1989.